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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Stephen R. Bacso

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EXAMINER

PARRY, CHRISTOPHER L

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/991,525	Applicant(s) BACSO ET AL.	
	Examiner Chris Parry	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/09/02, 07/01/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **All of the reference characters are not mentioned in the specification.** Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to because the text in block 71 in figure 5 is not legible. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because on line 13, the end of the sentence is incomplete as it is unclear to the examiner as to what the applicant is trying to describe at the end with "presenting". Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The step of updating the

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secure audit log with the viewing result in claim 3 is previously claimed in claim 2 and therefore, claim 3 fails to further limit claim 2.

5. Claims 2, 4, 5-8, 10-11, and 13-14 are objected to because of the following informalities:

- i. Claims 2, 4 and 6, are objected to because of a lack of antecedent bases as it is not clear what is meant by “pre-matching the opportunities” versus “matching the opportunities” because it is perceived that both features are performed or scheduled prior to the addition of alternate content. For the prior art rejection in this office action, the two terms are construed as equivalent.
- ii. Claims 2, 4, 5-8, 10-11, and 13-14 are objected to because the following terms lack antecedent basis:

In claim 2, “the programming stream”

In claim 2, “the source”

In claim 2, “the secure audit log”

In claim 2, “the viewing result”

In claim 4, “the programming”

In claim 4, “the source”

In claim 5, “the secure audit log”

In claim 5, “the viewing result”

In claim 6, “the content descriptor transmission stream”

In claim 6, “the opportunity map descriptors”

In claim 6, “the MDE”

In claim 6, "the designated source"

In claim 7, "the ME/DE"

In claim 7, "the MDE"

In claim 8, "the MDE"

In claim 8, "the operator"

In claim 10, "the data"

In claim 11, "the MDE"

In claim 11, "the capabilities"

In claim 13, "the guidance"

In claim 14, "the end-user components"

- iii. Claim 13 is objected to because the following limitations lack antecedent basis as the specification fails to provide adequate support for the operation of the content schedule component and the profile component as claimed.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. In particular the limitation, *"determining the source for alternate content as described previously"*.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 12, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Picco et al. "Picco" (U.S. 6,029,045).

Regarding Claim 1, Picco discloses a method for inserting local content into programming content (Abstract). Picco teaches, "determining targeted user characteristics" by disclosing the agent 150 based on the statistics, may select particular local content based on the statistics about the specific user or household (Col. 7, lines 6-41). Picco teaches, "presenting content in accordance with said characteristics" by disclosing based on various information about the user, the scheduler determines the local content that is going to be transmitted by the satellite to the receiver (Col. 7, lines 6-32).

Regarding Claim 12, Picco discloses a method for inserting local content into programming content (Abstract). Picco teaches, "means for determining targeted user characteristics" by disclosing the agent 150 based on the statistics, may select particular local content based on the statistics about the specific user or household (Col. 7, lines 6-41). Picco teaches, "means for presenting content in accordance with said

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characteristics” by disclosing based on various information about the user, the scheduler determines the local content that is going to be transmitted by the satellite to the receiver (Col. 7, lines 6-32).

Regarding Claim 15, Picco discloses a method for inserting local content into programming content (Abstract). Picco teaches, “a processing portion for determining targeted user characteristics” by disclosing uplink facility 102 which comprises scheduler 148, agent 150, and statistical collector system 152 used to determine which local content is going to be combined with the live programming data feed 106 (Col. 7, lines 2-32). Picco teaches, “a processing portion for presenting content in accordance with said characteristics” by disclosing the set-top box determines if a local content space in the programming data has been encountered, if a local content space has been detected, then in step 256, the set-top box determines, based on the user preferences and the content profiles of the pieces of local content stored on the disk, which piece of local content is going to be inserted into the programming data stream and presented to user (Col. 14, lines 1-17).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2-11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picco.

As for Claims 2 and 3, Picco teaches, "monitoring the programming stream for opportunities and content descriptors" by disclosing in figure 10, at step 254, the set-top box monitors the programming stream for local content space or "opportunities" (Col. 14, lines 4-6). Picco teaches, "determining the source for alternate content" by disclosing the scheduler sends control signals, also known as content profiles, that indicate to the set-top box whether the local content should be stored on disk (Col. 7, line 41 – Col. 8, line 11). Picco teaches, "matching the opportunity to the available content and the viewer characteristics" by disclosing to determine which local content is going to be combined with the live programming data feeds 106, the uplink facility may include a scheduler 148, an agent 150, and a statistical collector system 152. The scheduler uses the statistical data gathered by agent 150, to determine or "match" local content that is going to be transmitted to the household (Col. 7, lines 6-32). Picco teaches, "presenting content to the viewer" by disclosing if set-top box detects a local content space in the programming stream, local content stored from disk is inserted based on user preferences (Col. 14, lines 1-16). Picco discloses the set-top box may accumulate data about when the user saw which programs and how many times the user watched a particular program. Picco fails to explicitly disclose updating the secure audit log with the viewing result. However, the examiner gives Official Notice that it is notoriously well known in the art of video distribution systems to keep consumers' viewing records in a secured log. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Picco in order to keep a secure log on what viewers watched because such practice ensures that the follow-up billing would be accurate and the record is kept confidential.

As for Claim 4, Picco teaches, "monitoring the programming and content streams for opportunities and content descriptors" by disclosing in figure 10, at step 254, the set-top box monitors the programming stream for local content space or "opportunities" (Col. 14, lines 4-6). Picco teaches, "pre-matching the opportunities to the available content and viewer characteristics" by disclosing to determine which local content is going to be combined with the live programming data feeds 106, the uplink facility may include a scheduler 148, an agent 150, and a statistical collector system 152. The scheduler uses the statistical data gathered by agent 150, to determine or "pre-match" local content that is going to be transmitted to the household (Col. 7, lines 6-32). Picco teaches, "determining the source for alternate content as described previously" by disclosing the scheduler sends control signals, also known as content profiles, that indicate to the set-top box whether the local content should be stored on disk (Col. 7, line 41 – Col. 8, line 11). Picco does not explicitly disclose checking security rights at a function invocation to determine appropriateness of content insertion; presenting the content to the viewer if appropriate; and updating pre-matched opportunities for next function invocation. The examiner gives Official Notice that it is notoriously well known in the art of video distribution systems wherein parental control is available to keep inappropriate material from being presented to corresponding minors. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have implemented a similar security control and the necessary invocation process by verifying access rights to storage in Picco's system because the security check ensures appropriate material is delivered to the right viewers.

Considering Claim 5, the claimed elements of updating the secure audit log with the viewing result, corresponds with subject matter mentioned above in the rejection of claim 2, and is likewise treated.

As for Claim 6, Picco teaches, "monitoring the content descriptor transmission stream" by disclosing in figure 10, at step 254, the set-top box monitors the programming stream for local content space or "opportunities" (Col. 14, lines 4-6). Picco teaches, "matching the opportunity map descriptors with the receiver capabilities" by disclosing to determine which local content is going to be combined with the live programming data feeds 106, the uplink facility may include a scheduler 148, an agent 150, and a statistical collector system 152. The scheduler uses the statistical data gathered by agent 150, to determine or "match" local content that is going to be transmitted to the household (Col. 7, lines 6-32). Picco teaches "matching of the content descriptors to the viewer profile information" by disclosing if local content space has been detected, the set-top box determines, based on user preferences and the content profiles of the pieces of local content stored on the disk, which piece of local content is going to be inserted in to the programming data stream (Col. 14, lines 1-17). Picco teaches, "selecting the descriptors with the strongest content match if local persistent storage is available to the MDE" by disclosing the set-top box determines, based on user preferences and the content profiles of the pieces of local content stored on the

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disk, which piece of local content is going to be inserted in to the programming data stream (Col. 14, lines 1-17). Picco teaches, “determining if the content is already in storage” by disclosing set-top box searches the disk for matching local content to insert into the programming data stream based on user preferences (Col. 14, lines 1-17). Picco teaches, “determining if the content can be acquired in a timely manner” by disclosing local content is transmitted along with the live video feed (Col. 8, lines 56-59). Picco teaches, “verifying availability of storage” by disclosing the set-top box manages the operations of the disk (Col. 10, line 58 – Col. 11, line 4). Picco further teaches, “determining if content can be deleted to make storage available by comparing matches of the new content with existing content in storage, and replacing content with weaker matches to make storage available” by disclosing the set-top box determines which local content may be overwritten or removed (Col. 10, line 58 – Col. 11, line 4). Picco further teaches, “acquiring content from the designated source” by disclosing set-top box comprises receiving antenna 118 used to receive the satellite transmissions from uplink facility 102 (Col 11, lines 18-25). Picco teaches “placing acquired content in storage” by disclosing if set-top box determines user preferences matches the local content, then the content is stored to disk (Col. 13, lines 36-65). Picco fails to explicitly disclose verifying that permission is available to access the content and verifying access rights to storage if access rights are verified. The examiner gives Official Notice that it is notoriously well known in the art of video distribution systems wherein the use of parental controls are used to keep inappropriate material from being presented to corresponding minors. Therefore, it would have been obvious to one of ordinary skill in

the art at the time the invention was made to have implemented a similar security control and the necessary invocation process by verifying access rights to storage in Picco's system because the security check ensures appropriate material is delivered to the right viewers.

As for Claim 7, Picco teaches "the ME/DE forwards configuration triggers that indicate to the MDE if certain components need to be replaced to enable dynamic adaptation of the system to new feedback algorithms, better functional capability, and/or component code fixes" by disclosing the scheduler or "ME/DE" may also generate command signals for the set-top box or "MDE" which, for example, request the set-top box to update a local content control block, request an upload of statistics from the set-top box, indicate a new download to the set-top box, download software updates to the set-top box for the software being executed by the set-top box, or download a control strategy to the set-top box (Col. 7, lines 41-48).

As for Claim 8, Picco teaches, "whereby the MDE also receives profile characteristic information on the viewers from the operator" by disclosing the local content includes content profiles that indicate to the set-top box or "MDE" the interest of local content for viewers in the household. If the content profiles match with the user preferences then the local content is stored on disk (Col. 13, lines 36-65).

As for Claims 9 and 10, Picco fails to explicitly disclose viewers profile data is encrypted to prevent unauthorized access and storing the files within the facilities of a CA system. However, the examiner gives Official Notice that it is notoriously well known

in the art of video distribution systems to keep customer's confidential information in a secured part of a system. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Picco in order to securely store viewer's profiles because such practice would protect confidential information about the subscription service's subscribers.

As for Claim 11, Picco fails to explicitly disclose a plurality of instances of the MDE can be generated to match one or more of the capabilities and requirements of the system and the capabilities of the various receiver models on the network. The examiner gives Official Notice that it is notoriously well known in the art of video distribution systems to provide systems that provide load balancing to prevent a server from being overwhelmed with requests for content. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a system that provided load balancing for the benefit of preventing an overload of bandwidth throughout the system

Considering Claim 14, the claimed elements of the delivery engine is provided in a plurality of instances to provide for load balancing and capacity requirements, corresponds with subject matter mentioned above in the rejection of claim 11, and is likewise treated.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Picco in view of Eldering et al. "Eldering" (U.S. 6,704,930).

As for Claim 13, Picco teaches, "a head end component" by disclosing uplink facility 102 shown in figure 4. Picco further teaches, "a matching engine for accessing the content schedule and profile components to match content to end-users" by disclosing the scheduler uses information gathered by agent 150 to determine the local content that is going to be transmitted to the user (Col. 7, lines 6-41). Picco teaches, "a delivery engine for delivering the matched content" by disclosing live television programming data feeds 106 and the local content feeds 108 are multiplexed by a multiplexer 140 into a compressed stream (Col. 6, lines 46-50). Picco further teaches, "a combiner that receives the delivered matched content and combines it with available content streams" by disclosing all of the MPTS's are then combined together using a combiner 142 (Col. 6, lines 46-53). Picco teaches, "a receiver component" by disclosing set-top box 120 shown in figure 7. Picco teaches "a data filter for filtering data" by disclosing (TS) processor 184 used to extract local content from the MPTS and split the MPTS signal into a compressed digital audio stream and a compressed digital video stream (Col. 11, lines 33-48). Picco teaches, "a microdecision engine for providing the guidance and commands to present content to the end-user from the data filter" by disclosing CPU 188 which controls the storage of content onto disks 186 (Col. 11, lines 44-51 and Col. 12, lines 24-36). Picco teaches, "a data network between the head end and the end-user components for transmitting data" by disclosing satellite network 104 shown in figures 3 and 4 (Col. 6, lines 1-16). However, Picco fails to explicitly disclose a

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content schedule component and a profile component. In a related art pertaining to video distribution, Eldering discloses in figure 11, AD source 211 or "content schedule component" and subscriber characteristics source 221 or "profile component". Eldering teaches the ad source 211 may provide the duration 215 of the advertisement, ad characteristics 217, and bandwidth requirements 219 (Col. 9, lines 5-15). Further, Eldering teaches, a subscriber characteristics source 221 provides information on subscriber identification 223 and subscriber characteristics 225 (Col. 9, lines 15-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Picco with the teachings of Eldering in order to facilitate the headend comprising a content schedule component and profile component for the benefit of providing management to the headend by managing the insertion process of local content in the programming stream (Eldering – Background).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to providing targeted advertisements and content to users.

U.S. Pat. No. 6,721,955 to Khoo et al.

U.S. Pat. No. 6,463,585 to Hendricks et al.

U.S. Pub. No. 2002/0042914 to Walker et al.

U.S. Pub. No. 2002/0083441 to Flickinger et al.

U.S. Pat. No. 6,324,519 to Eldering

U.S. Pat. No. 6,698,020 to Zigmond et al.

U.S. Pat. No. 6,718,551 to Swix et al.

U.S. Pat. No. 6,216,129 to Eldering

U.S. Pat. No. 5,661,516 to Carles

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Parry whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiners Initials: _____
December 22, 2005

CLP



Patent Examiner
Art Unit 2614